Serial No. 10/642,602

#### REMARKS

### STATUS OF THE CLAIMS

In accordance with the foregoing, the claims have been amended and new claim 17 has been added. Claims 1-17 are pending and under consideration.

Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent from including all of the limitations of the base claim and any intervening claims.

CLAIMS 1-3, 5-9, AND 11-15 ARE REJCTED UNDER 35 U.S.C 103(a) AS BEING
UNPATENTABLE OVER APPLICANTS ADMITTED PRIOR ART ("AAPA") IN VIEW OF KAJIYA
(7,092,643)

Kajiya relates to an Mach-Zehnder (MZ) optical modulator that <u>modulates</u> an output optical signal based on a modulation signal. The MZ optical modulator outputs the output optical signal that is turned ON/OFF in proportion to the modulation signal. A <u>modulation factor</u> is set as a suitable bias voltage and is applied to the MZ optical modulator, an initial phase is set to 0, and a sinusoidal wave of a repetitive frequency is input as the modulation signal. Consequently, the output optical signal is "output as an optical signal that is turned ON/OFF in the repetitive frequency 2Fc that is two times the repetitive frequency." See col. 1, lines 18-65. The MZ optical modulator modulates the continuous wave light.

In contrast, amended claim1 recites

"a separating apparatus for time division multiplexed signal light, which is input with time division multiplexed signal light obtained by multiplexing a plurality of signal lights on a time axis, and guides said time division multiplexed signal light, respectively, to a first optical gate section in which the transmittance thereof is periodically changed in accordance with a repetition frequency of "n" times a bit rate of a signal light of said plurality of signal lights (n is a positive integer excluding 1),

wherein said first optical gate section comprises; a first optical gate in which an optical transmission characteristic thereof with respect to a drive voltage is periodically changed, and a first drive circuit that supplies to said first optical gate a drive signal having a repetition frequency equal to the bit rate of said signal light of the plurality of signal lights, and having the voltage magnitude corresponding to a voltage difference in an n/2 period in the periodic optical transmission characteristic of said first optical gate.

Serial No. 10/642.602

The gate of amended claim 1 <u>transmits</u> the time division multiplexed signal light.

Accordingly, Kajiya fails to teach or suggest the separating apparatus of amended claim 1.

Furthermore, the Examiner admitted on page 3 of the Office Action that the AAPA does not disclose that the "drive signal to the first modulator has a frequency equal to that of the bit rate of the signal light and having the voltage magnitude corresponding to a voltage difference in an n/2 period in the periodic optical transmission characteristic of said first optical modulator."

Accordingly, amended claim 1 is patentably distinguished over the cited art.

Claims 2-3, 5-9, and 11-15 are dependent, directly or indirectly, on independent claim 1 and include all of the features of that claim, plus additional features which are not taught or suggested by the cited art and therefore are patentably distinguished.

## CLAIM 4 IS REJECTED UNDER 35 U.S.C 103(a) AS BEING UNPATENTABLE OVER AAPA IN VIEW OF KAJIYA AND FURTHER IN VIEW OF WAY (2002/0135838)

Claim 4 is dependent, directly or indirectly, on independent claim 1 and includes all of the features of that claim, plus additional features which are not taught or suggested by the cited art and therefore is patentably distinguished. Furthermore, nothing has been cited or found in Way that cures the deficiencies in regards to the AAPA in view of Kajiya.

# CLAIM 10 IS REJECTED UNDER 35 U.S.C. 103(a) AS BEING UNPATENTABLY OVER AAPA IN VIEW OF KAJIYA, AND IN FURTHER VIEW OF KARTALOPOULOS

Claim 10 is dependent, directly or indirectly, on independent claim 1 and includes all of the features of that claim, plus additional features which are not taught or suggested by the cited art and therefore is patentably distinguished. Furthermore, nothing has been cited or found in Kartalopoulos that cures the deficiencies in regards to the AAPA in view of Kajiya.

## **NEW CLAIM**

New claim 17 recites a separating apparatus that

"guides said time division multiplexed signal light, respectively, to a first optical gate section in which the transmittance thereof is periodically changed in accordance with a repetition frequency of "n" times a bit rate of said signal light (n is a positive integer greater than 2)."

Serial No. 10/642,602

Neither the AAPA, Kajiya, Way, or Kartalopoulos teaches a separating apparatus in this manner. Therefore, it is respectively submitted that new claim 17 distinguishes over the cited art.

## **CONCLUSION**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: Hareh 3, 2008

Paul I. Kravetz

Registration No. 35,230

1201 New York Avenue, N.W., 7th Floor

Washington, D.C. 20005 Telephone: (202) 434-1500

Facsimile: (202) 434-1501